

Subject Project: Facility Condition Assessment of
Materials Recovery Facility
1313 West Mount Vernon Ave

Applied Management Engineering conducted a facility condition inspection of the subject facility occurring October 19 through the 23rd. Deferred maintenance, component renewal, cyclic maintenance, safety items as well as defined projects (supplied by the City) were recorded as found and entered into the Facility Condition Information System (**FCIS**) data base.

The numbers in this report were generated through the **FCIS** "Multi-Year Maintenance & Repair Plan" report set at a ten year range. The ten year range of this report captures most requirements with the most critical issues scheduled/prioritized at year one and the less critical projects/issues appropriately prioritized and scheduled through year ten. The ten year plan captures high cost capital projects that may require additional time for funding.

The inspection of this site included the following buildings and site area:

- Material Recovery Facility (Building 1725) 74,994 gross square feet
CRV \$3,236,000
- Driver's Lounge (Building 1726) 630 gross square feet
CRV \$52,000
- MRF Scale House (Building 1727) 296 gross square feet
CRV \$19,000
- Site 133, 420,789 square feet, 9.6 acres approximately
(Site includes fuel station)

Building Current Replacement Values (**CRVs**) were provided by the City. For consistency the City uses the building replacement values as determined by the State of Wisconsin for the purposes of the Local Government Property Insurance Fund.

Table A included in this report summarizes the ten year projected requirement totals. The "Facility Condition Index" (**FCI**) is the total of requirement divided by the CRV of the facility. The FCI is a measure of the current condition of the facility. The City's current FCI goal for outlying industrial use facilities is .20. Note that an FCI of less than .20 is defined as "in good condition", higher than .20 is defined as being in "poor condition". The FCI for the facilities inspected are as follows:

- Material Recovery Facility (Building 1725) FCI .66
- Driver's Lounge (Building 1726) FCI .43
- MRF Scale House (Building 1727) FCI .39
- Site 133, (Site includes fuel station)

Note that the City currently does not provide a FCI rating of the site.

The Drivers Lounge and the Scale House have poor FCI ratings. The size of these buildings and the relatively low CRV represents only relatively minor budget impact. The impact of the Material Recovery Facility's high FCI number and the need for additional capital expenditures to achieve a FCI of .20 will be addressed in the "Projected Modeling" section of this report.

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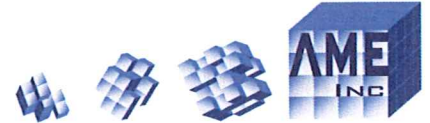


TABLE - A 10 YEAR PROJECTED PROJECT AND DEFICIENCY TOTALS		
MT. VERNON AVE. MRF GROUNDS Projects	<i>Project Summary:</i> 1. Replace Truck Scales - \$135,000 (year 2011) 2. Dock Wall Replacement - \$1,500,000 (beginning year 2020)	\$1,651,113
MATERIAL RECOVERY FACILITY (MRF) Projects	<i>Project Summary:</i> 1. Mechanical System Remodeling and Enclosure - \$39,000 2. Dry Fire Suppression System Replacement - \$439,000	\$477,454
MT. VERNON AVE. MRF GROUNDS Deficiency	General Deficiencies	\$856,568
MATERIAL RECOVERY FACILITY (MRF) Deficiency	General Deficiencies	\$1,657,583
DRIVERS LOUNGE Deficiency	General Deficiencies	\$22,612
MRF SCALE HOUSE Deficiency	General Deficiencies	\$7,367
Grand Total		\$4,672,697

Capital Projects:

Note that the City generally defines/creates projects that have originally been initiated as one of the Maintenance or Renewal classification and as the priority year decreases. The City defined the following projects for this report.

- 2 Truck Scales \$130,000, Priority year 2011 (**Currently funded project**).
- Replacing Concrete Seawall \$1,500,000, Priority year 2020 (condition evaluated annually).
- Installation of 3 Catch Basins at the south trench drain at retaining wall location. \$16,800.
- Replacing HVAC system for second floor office/class room area, \$38,000, Priority year 2012.
- Replacing dry pipe sprinkler system \$439,000, Priority year 2012.

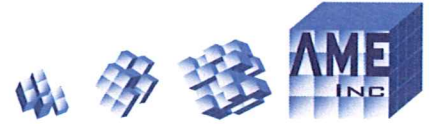
Deficiencies:

Note that the addendum includes the detailed report including all the deficiencies and projects identified during this inspection. Deficiencies are sorted by facility and then by "deficiency type". These deficiency types were then identified and grouped by priority year and type for inclusion on the following highlighted deficiencies lists.

Site:

- Replace Site Drain Grate at south property line \$210,000, Priority year 2011
- Site Fencing \$134,000, Priority year 2015; \$42,000, priority year 2020
- Paving replacement \$ 63,000, Priority year 2011; \$138,000, Priority year 2012
- Paving Asphalt Overlay \$ 179,000, Priority year 2012

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Materials Recovery Facility:

- Roofing \$579,000, Priority year 2011
- Replace Office Mechanical System \$45,000, Priority year 2011
- Repair/Replace Overhead Doors \$263,000
- Prepare and Paint structural Steel \$400,000

The above deferred maintenance items should be considered for prioritization as projects as funding allows.

Work Type Definitions:

Deferred Maintenance (DM) includes items that are currently physically or operationally defective and have not been scheduled for corrective action or have been postponed due to lack of resources. The corrective action for a project or deficiency given the Work Type of Deferred Maintenance usually occurs in the first three years (Priority Year 1-3) of a five or ten year maintenance plan. The total deferred maintenance need for the entire facility over ten years is approximately \$2,700,000

Component Renewal (CR) identifies the projected or expected replacement of a building system or system component (lighting system, roof system, boiler, chiller, etc.) as it reaches the end of its useful life through a physical evaluation and application of average expected life-cycle analysis. The corrective action for a project or deficiency given the Work Type of Component Renewal usually occurs between years 3-10 (Priority Year 3-10) of a five or ten year plan. The total component renewal need for the entire facility over ten years is approximately \$1,700,000

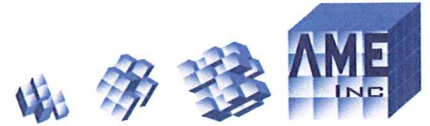
Cyclic Maintenance (CY) is the Work Type given to a project or deficiency that recurs based on normal wear patterns. Typically, painting, caulking, and carpet replacement are items that fall in to this category. The total cyclic maintenance need for the entire facility over ten years is approximately \$252,000

Safety (SF) refers to items that need to be corrected immediately to prevent injury or accident. This would include items such as exposed wiring, a broken handrail or the replacement of a shaft guard. Items given the Work Type of Safety should be corrected immediately and are given the priority of 0 or 1. The total safety need for the entire facility over ten years is approximately \$16,000.

Projected Modeling Cost Projection:

The following "Projected Modeling" tables are included in this report as a tool to assist in projecting funding needs over time to maintain the repair of this facility over the projected ten year time frame. The first model is based on an annual funding amount of \$500,000 and shows the resulting FCI and backlog. The second model projects the required annual funding to reach a 0.2 FCI within the ten year period. The variables and values included for these calculations are as follows:

- Inflation rate 3%
- Backlog deterioration 4%
- Plant Deterioration 0.1%
- CRV Growth Rate 2%



Backlog and Funding Models

Model 1

YEAR	INFLATION RATE	BACKLOG DETERIORATION RATE	PLANT DETERIORATION RATE	CRV GROWTH RATE	PLANT GROWTH (MILLIONS)	EXTRA FUNDS (000s)	CRV (MILLIONS)	PLANT DETERIORATION (000s)	FUNDING (000s)	BACKLOG (000s)	FCI
2011	3	4	0.1	2	0	0	3.8	4	500	2892	0.76
2012	3	4	0.1	2	0	0	3.8	4	500	2598	0.68
2013	3	4	0.1	2	0	0	3.9	4	500	2284	0.59
2014	3	4	0.1	2	0	0	4	4	500	1948	0.49
2015	3	4	0.1	2	0	0	4.1	4	500	1588	0.39
2016	3	4	0.1	2	0	0	4.2	4	500	1204	0.29
2017	3	4	0.1	2	0	0	4.2	4	500	792	0.19
2018	3	4	0.1	2	0	0	4.3	4	500	352	0.08
2019	3	4	0.1	2	0	0	4.4	4	500	-119	-0.03
2020	3	4	0.1	2	0	0	4.5	5	500	-623	-0.14

Model 2

YEAR	INFLATION RATE	BACKLOG DETERIORATION RATE	PLANT DETERIORATION RATE	CRV GROWTH RATE	PLANT GROWTH (MILLIONS)	EXTRA FUNDS (000s)	CRV (MILLIONS)	PLANT DETERIORATION (000s)	FUNDING (000s)	BACKLOG (000s)	FCI
2011	3	4	0.1	2	0	0	3.8	4	452	2940	0.77
2012	3	4	0.1	2	0	0	3.8	4	436	2713	0.71
2013	3	4	0.1	2	0	0	3.9	4	421	2487	0.64
2014	3	4	0.1	2	0	0	4	4	405	2260	0.57
2015	3	4	0.1	2	0	0	4.1	4	389	2033	0.5
2016	3	4	0.1	2	0	0	4.2	4	373	1807	0.43
2017	3	4	0.1	2	0	0	4.2	4	357	1580	0.38
2018	3	4	0.1	2	0	0	4.3	4	342	1353	0.31
2019	3	4	0.1	2	0	0	4.4	4	326	1127	0.26
2020	3	4	0.1	2	0	0	4.5	4	310	900	0.2